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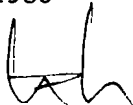


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### M E M O R A N D U M

DATE: October 27, 1986

TO: File

FROM: Larry Lumeh 

SUBJECT: Indiana/R05-8307-04C/IN0111

Hammond/Mobil Oil Company (Revised Memo)

IND042329631

Mobil Oil Corporation has operated this facility for about thirty years. The property was owned by Barnes Magnine Oil Company prior to 1930. Sakoni Vacuum acquired it from Barnes Magnine in 1930, operating it until 1955. Mobil Oil Company bought it in 1955. Mobil Oil continued to operate the facility as a refinery until 1972 when it was converted to a storage facility for finished products from other active Mobil Company refineries. The Mobil Oil Company property is about 100 acres in area housing several tanks, a defunct refinery plant, a dock and some office buildings (Figure 1). According to Joe Coco, the current superintendent, the company used and maintained three landfills on site for disposing of refinery sludge and three pits (20' x 200' x 20') for dewatering sludge before disposal. Mr. Coco was able to define the approximate locations of the landfills (Figure 1). The sludge pits still exist, although they are no longer being used. During refinery periods, the sludge pits were occasionally cleaned, and their contents landfilled. However, since the refinery closed in 1974, the pits haven't been cleaned. This site was identified to the U.S. EPA in the form of a Preliminary Assessment submitted by the Indiana Dept. of Environmental Management.

On the day of initial inspection, an oily liquid was visible below the frozen water layer in the pits. No waste quantities or types

were known for either the landfills or sludge pits. Because neither the landfills nor the sludge pits were lined, it was decided that the sludge pits be sampled at a later date when the ice melts. It was anticipated that the landfills would contain the same wastes as found in the sludge pits since the landfills were fed from the pits.

Part of the refinery onsite was being dismantled on the day of the inspection. It was observed that the insulation (mostly asbestos) on the pipes, stacks and boilers had been partially removed. Mr. Coco confirmed that 800 cubic yards of asbestos had been removed, and another 1000 cubic yards are slated for removal by the end of the year (1986). Mobil contracted the Mid-West Asbestos Removal Company of Tinley Park, Illinois for stripping the asbestos from the equipment and Calumet Waste Systems of Hammond for transportation of the asbestos to the Wheller landfill for disposal. During removal, Gabriel Laboratories was contracted to monitor the air for safety purposes. The asbestos removal is a first step toward complete demolition of the refinery plant. So far the asbestos removal has been restricted to areas outside onsite structures.

A second visit was made to the site on April 14, 1986, at which time the sludge pits were sampled. Three sediment samples were obtained, one in each pit (Figure 2). The company split samples with FIT for their own analysis. Analysis of these samples indicate the presence of several heavy metals and organics, at extremely high levels. The north, central and southern pits, in that order, contained arsenic (53 ppm, 33 ppm, 70 ppm), lead (3440 ppm, 510 ppm, 1220 ppm) and barium (262 ppm, 182 ppm, 268 ppm). Organic contaminants included total xylene (18000 ppm, 900 ppm, 4000 ppm), toluene (3000 ppm, 0.0 ppm, 1100 ppm), and ethyl benzene (3000 ppm, 110 ppm, 980 ppm). For a complete list of chemicals detected, see Data Sheet-Section 5 of this report. Due to the lack of targets, it is not likely that the pits and landfill pose immediate danger. However, the proximity of these wastes to the ship canals (Figure 1) may be a long-range problem.

There hasn't been any major worker injuries in two and half years. Thirteen full-time employees have access to the facility. The site is completely fenced using a 6-foot fence topped with barbed wires, and a main gate that is monitored 24 hours a day. Each tank is diked for protection against spills, and this diked system is backed-up by a well point system to collect any slop oil from groundwater. The oil is recovered in a slop oil tank and the water treated before it is dumped to the city sewer.

The company has a permit for discharge to the sewer, and the city regularly checks the quality of this water. An air pollution control permit is maintained for the asbestos removal. A discharge resolution number was issued to the company for shipping asbestos from their facility. Because of the small quantities of tank bottoms the facility generates, the plant is not considered a hazardous waste generator and not required to obtain permits for this waste.

On May 13, 1985, about 100 gallons of oil was spilled at the facility dock. The clean up was supervised by the coast guard and state officials were notified.

This facility is about 100' from residential homes and 10' - 20' from Lake George and Indiana Harbor Canals.